

In the suspensory ligament of the Ox there is a large amount of muscular tissue, not only on its surface but also embedded in its interior. On the lower half of its superficial surface we find a thick layer of fleshy fibres. This is even continued down for some distance upon the slips into which the ligament divides. But it is upon the deep surface of the suspensory ligament that we observe the greatest quantity of muscular tissue. Here it extends from the origin of the structure down to the point where it subdivides, and it is disposed in three parallel and longitudinal strands; of these (1) one passes down to the angle of divergence of the two slips for the sesamoids of the medius, (2) another to the angle of divergence of the slips for the sesamoids of the annularis, whilst (3) the third is carried downwards between the two preceding to the central slip, and this is much the most strongly marked; indeed, at the lower part of the ligament, it extends right through the structure to its posterior or superficial surface. Each strand consists of short fibres arranged in an irregularly bipenniform manner.

When thin transverse microscopic sections of this ligament are made, the muscular tissue is seen to penetrate deeply into its substance. It is arranged in the form of four small circles or rings, with thick outlines placed side by side, nearer the anterior than the posterior surface of the structure (Pl. XI. figs. 8 and 8*a*.) It is present in much larger quantity than in the case of the Horse. When examined under the microscope these transverse sections show a considerable number of fat cells associated with the muscular fibres, and amidst these transversely cut nerves and blood-vessels.

But we must endeavour to determine the intrinsic muscle or muscles from which the suspensory ligament of the Ox is derived. In this we are aided by the definite arrangement of the muscular fibres. In the Horse only one muscle, viz., the flexor brevis medii, enters into its formation; in the Ox we have clear proof of at least two muscles. Each muscular ring seen in the substance of the transversely divided ligament represents the head of a flexor brevis. The ligament is thus formed by the union and fibrous degeneration of both heads of the flexor brevis medii, and of the flexor brevis annularis. The central slip of attachment which passes forwards between the digits, simply represents a portion of the outer head of the flexor brevis medii, and of the inner head of the flexor brevis annularis, proceeding to obtain an insertion into the extensor tendons.

No evidence exists to show that any of the other intrinsic muscles which usually belong to the medius and annularis are contained in this ligament.

But it may be asked, what do those tendinous cords which join the tendons of the perforatus homologate? Are they adductors, or indeed have they any muscular origin at all? I feel confident that they have not. Even before they separate from the ligament they have an appearance as if they hardly belonged to it, but constitute a thick layer on its superficial surface distinct from, although united to the body of the structure. I believe that they are derivations from the dense fascia, which invariably covers the